Gulf of Mexico Harmful Algal Bloom Bulletin

26 December 2006

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 21, 2006

Conditions Report

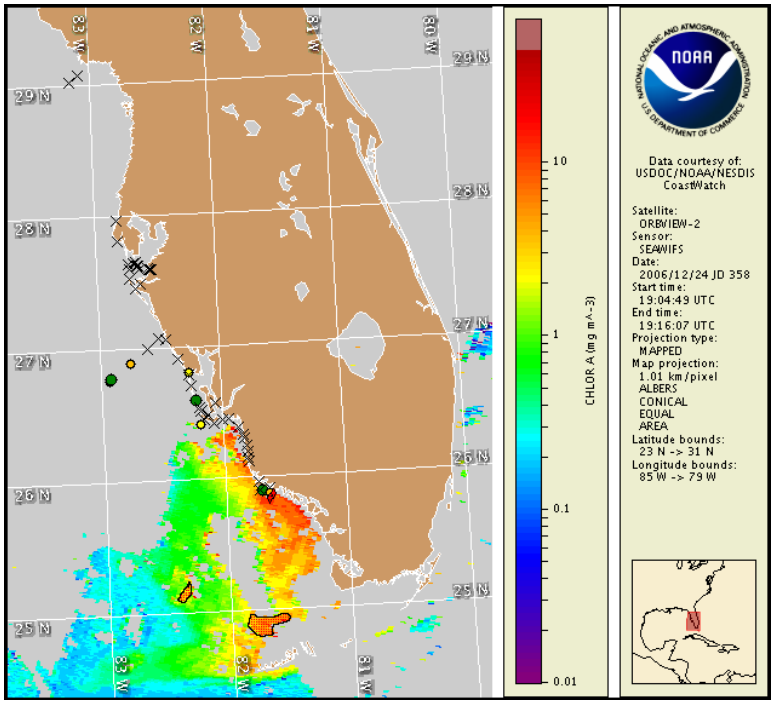
A harmful algal bloom has been identified in patches from Sarasota to Collier Counties and in Monroe County. Patchy, very low impacts are possible in Charlotte County today followed by no impacts expected through Wednesday. Patchy, moderate impacts are possible in central Collier today, followed by no impacts expected through Wednesday. No impacts are expected in Sarasota, Lee, Monroe and northern Collier Counties today through Wednesday.

Analysis

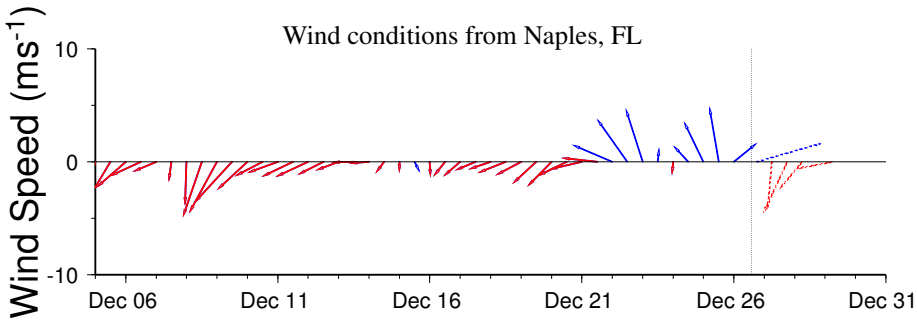
A harmful algal bloom continues to be present in patches alongshore from Sarasota to Lee Counties and has been reported at lowb concentrations alongshore of central Collier County (12/22 FWRI). *K. brevis* samples have been found southwest of New Pass, Venice and Blind Pass, indicating the bloom is present in patches offshore (12/22 FWRI). Satellite imagery has been obscured by clouds and limits analysis. Chlorophyll is elevated offshore of Cape Romano (up to 11 μg/L) Consistent northerlies may continue southwesterly transport and maintain bloom location offshore. Strong northwesterlies today may increase impacts in Charlotte and central Collier Counties. Continued offshore sampling is recommended.

In the Florida Keys region, *K. brevis* samples range from very low to medium concentrations on the gulf side of the lower Keys and present alongshore from Cudjoe Key to Key West (12/22 FWRI). Chlorophyll levels are generally 4 μg/L up to 25 miles north of the Keys. Northeasterlies to easterlies may maintain bloom location. Slight southerly transport is possible.

~Fenstermacher & Bronder



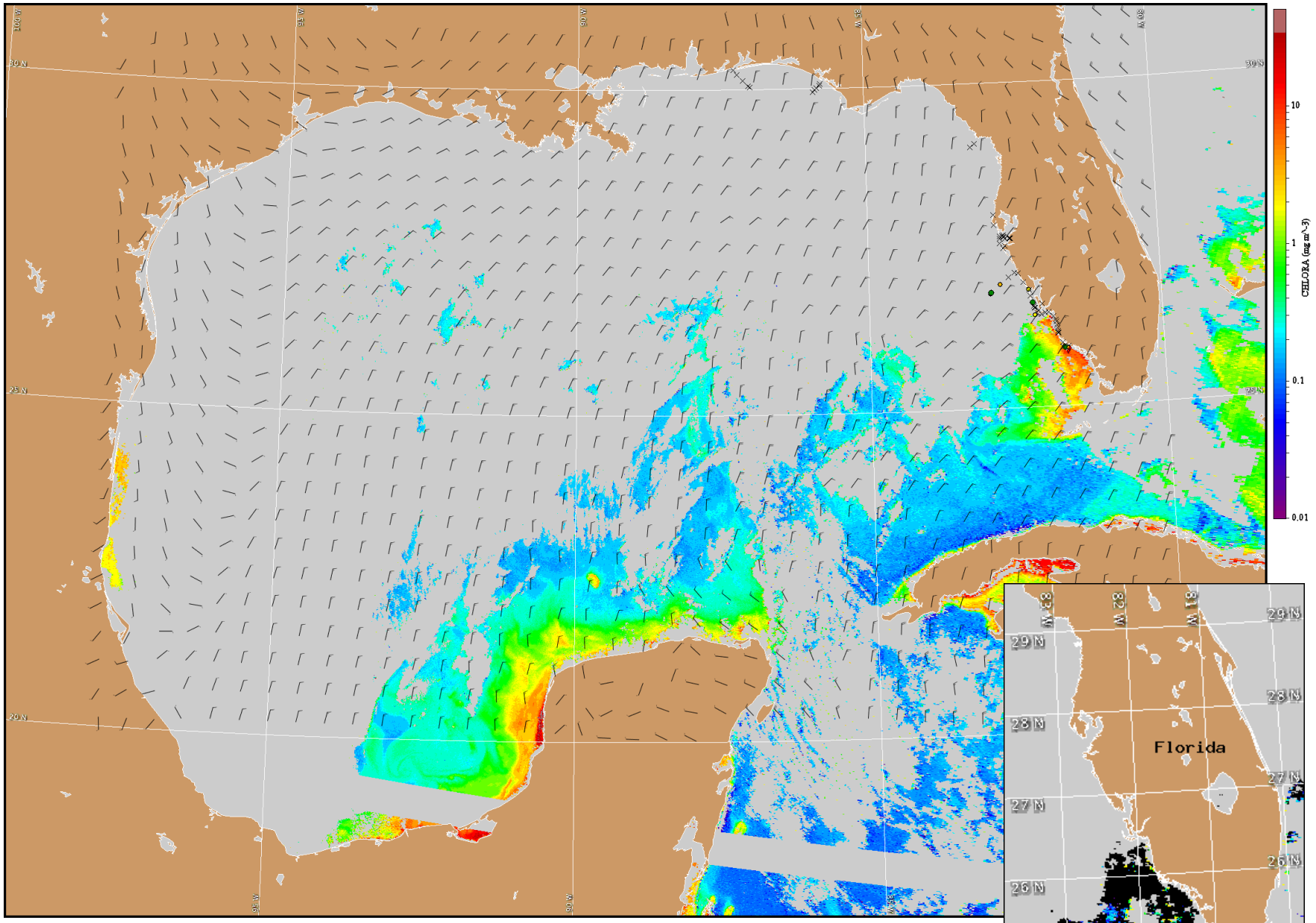
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration categories and corresponding cell count values from Florida Fish and Wildlife Research Institute. For a key to the cell concentration descriptions, visit http://research.myfwc.com.Cell concentration sampling data from December 16-21 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Strong north to northwesterlies today (15-20 knots; 8-10 m/s) followed by north to northeasterlies Wednesday and easterlies on Thursday (10-15 knots; 5-8 m/s).

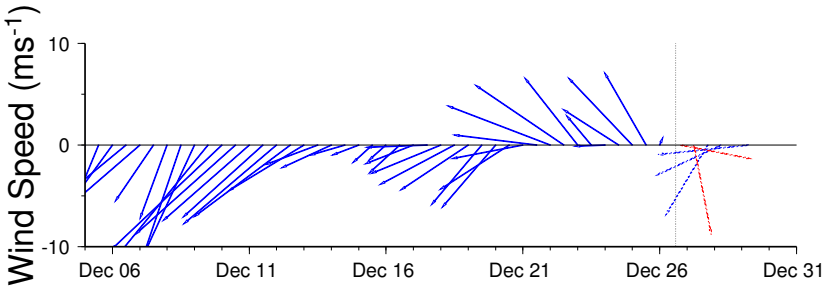
Keys: Strong northwesterlies today (15-20 knots; 8-10 m/s) followed by northeasterlies to easterlies on Wednesday and Thursday (10-15 knots; 5-8 m/s).



Satellite chlorophyll image and forecast winds for December 27, 2006 12Z with cell concentration sampling data from December 16-21 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Sand Key, FL



Wind conditions from Venice Pier, FL